

ABSTRACT

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A STUDY OF THE EFFECTS OF PARTICIPATION IN LOW-IMPACT AEROBICS
IN CONJUNCTION WITH INDIVIDUAL COUNSELING
ON THE SELF-ESTEEM OF A WOMAN OVER EIGHTEEN

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This study analyzed the effects of participation in low-impact aerobics in conjunction with individual counseling on the self-esteem of a single subject, a woman over the age of eighteen. Previously research has concluded that physical exercise has had positive effects on self-esteem. There has also been research which assessed the effects of physical exercise in combination with counseling; however there is limitations to this research in that there is a lack of these studies which are relative to women.

Over a ten week period, with the baseline and intervention phases each consisting of five weeks, a woman's self-esteem was determined via the Index of Self-esteem. During the five week intervention, the woman participated in low-impact aerobics three times a week and received individual counseling sessions with the researcher for one hour each week. As hypothesized, the woman's self-esteem scores decreased (meaning her self-esteem improved) in the intervention phase. With each week of the intervention, her self-esteem improved. Implications for these findings for practice and future research are discussed.

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CHAPTER ONE

Introduction and Statement of Problem

Self-esteem is defined as how we rate our characteristics and ourselves; it is our unique judgment of our value and is shown through the attitudes we have towards ourselves. Baron and Byrne define self-esteem as “an individual’s attitude about him or herself, involving self-evaluation along a positive-negative dimension.”¹ It is viewed by researchers and theorists as vital in explaining human behavior.² Campbell considers self-esteem to be the most important factor in controlling and understanding behavior.³ Fox proposes that self-esteem is the most readily available index of mental health and emotional adjustment.⁴

High self-esteem has been related to consistent participation across social tasks, greater social support and acceptance from others, self confidence and popularity.⁵ It is also connected to characteristics such as happiness, openness to growth, assertiveness, willingness to take risks and independence.⁶ Hong, Bianca, Bianca and Bollington

¹ R.A. Baron and D. Byrne, Social Psychology: Understanding Human Interaction (Boston, MA: Allyn & Bacon, 1991), p. 522.

² Merrill J. Melnick and Swapan Mookerjee, “Effects of Advanced Weight Training on Body-Cathexis and Self-esteem,” Perceptual and Motor Skills 72 (1991) : 1335-1345.

³ R. Campbell, The New Science: Self-Esteem Psychology (Lanham, Maryland: University Press of America, 1973).

⁴ K.R. Fox , “The Self-Esteem Complex and Youth Fitness,” Quest 40 : 230-246.

⁵ R.C. Ziller, The Social Self (New York: Pergamon, 1973).

⁶ K. Gaudin, “Self-Esteem Isn’t a Dirty Word,” Democrat and Chronicle (March 7 1989) : 50.

correlate self-esteem with life-satisfaction, sex, and age.¹ Gender is a very interesting variable in relation to self-esteem. As to date, no found literature suggests women to have higher self-esteem than men. However, much research has indicated the reverse, that overall, males have higher self-esteem than females, and they score notably higher in global self-esteem than females.²

Psychological functioning, which includes self-esteem, is affected by physiological capabilities.³ Thus, both physiological abilities and body image contribute to self-esteem.⁴ Fox and Corbin identified the five most relevant aspects of physical self-esteem: attractiveness of the body, physical strength, sports competence, general physical self-valuation, and physical exercise or condition.⁵

Many studies support the physiological and psychological effects of exercise on self-esteem. It has been found that how one feels about their body corresponds with how they feel about themselves.⁶ Research indicates that improved fitness may increase self-esteem.⁷ After reviewing 16 studies regarding the effects of exercise on self-esteem,

¹ S.M. Hong, M.A. Bianca, M.R. Bianca and J. Bollington, "Self-Esteem: The Effects of Life-Satisfaction, Sex, and Age," Psychological Reports 72 (1993): 95-101.

² Idem, P.B. Moran and J. Eckenrode, "Gender Differences in the Costs and Benefits of Peer Relationships during Adolescence," Journal of Adolescent Research 6 (1991): 396-409. E.J. O'Brien, "Sex Differences in Components of Self-Esteem," Psychological Reports 68 (1991): 241-242. U. Sekaran, "Factors Influencing the Quality of Life in Dual-Career Families," Journal of Occupational Psychology 56 (1983): 161-174. A.H. Winefield, H.R. Winefield, M. Tiggemann, and R.D. Goldney, "A Longitudinal Study of the Psychological Effects of Unemployment and Unsatisfactory Employment on Young Adults," Journal of Applied Psychology 76 (1991): 424-431.

³ Carla M. Trujillo, "The Effect of Weight Training and Running Exercise Intervention Programs on the Self-Esteem of College Women," International Journal of Sports Psychology 14 (1983): 162-173.

⁴ Melnick and Mookerjee, Perceptual, 72.

⁵ K.R. Fox and C.B. Corbin, "The Physical Self-Perception Profile: Development and Preliminary Validation," Journal of Sport and Exercise Psychology 11 (1989): 408-430.

⁶ P.F. Secord and S.M. Jourard, "The Appraisal of Body-Cathexis: Body-Cathexis and the Self," Journal of Consulting Psychology 17 (1953): 343-347.

⁷ F.R. Biles, "Self-concept Changes in College Freshmen Women in Basic Physical Education Classes Using Two Methods of Instruction" (Doctoral dissertation, Ohio State University, 1968), in Dissertation Abstracts 23 : 1234. W. Morgan, "Psychological Benefits of Physical Activity," in Exercise in Health and Disease,

Sonstroem resolved that the regularity of positive findings support the belief in the wholesome effects of exercise programs.¹

Attention has also been given to the effects of a variety of physical exercises specifically on women's self-esteem. The self-esteem of college women who participated in physical education classes was found to improve.² Also, Hughes found that the self-concept of college females can be heightened by raising their physical fitness levels.³

In addition to this, social support (an aspect of individual counseling) has been found to reduce mortality and morbidity.⁴ Researchers have found social support to have a direct effect on mental health as it is advantageous regardless of the amount of stress an individual is experiencing.⁵

Hilyer and Mitchell as well as Collingwood and Willett have conducted research regarding the effects of physical conditioning in combination with group counseling on self-concept.⁶ However, their studies did not focus on women and their group counseling did not center on emotional issues.

edited by F. Nagle and H. Montoye (Springfield, Ill.: Charles C. Thomas, 1981). H. Rothfarb, "A Study of the Psychological Needs and Self-Esteem of College Men," (Doctoral dissertation, Boston College, 1970).

¹ R. J. Sonstroem, "Exercise and Self-Esteem," in Exercise and Sport Sciences Reviews 11 (1984) : 123-155.

² Biles, "Self-Concept Changes."

³ C.A. Hughes, "A Comparison of the Effects of Four Teaching Techniques of Body Conditioning Upon Physical Fitness and Self-Concept" (Doctoral dissertation, University of Utah, 1974) in Dissertation Abstracts International 34 (1974) : 3957A-3958A.

⁴ J.S. House, D. Umberson & K.R. Landis, "Structures and Processes of Social Support," Annual Review of Sociology 14 (1988) : 293-318.

⁵ G. Andrews, C. Tennant, D. Hewson & G. Vallian, "Life Event Stress, Social Support, Coping Style, and Risk of Psychological Impairment," Journal of Nervous and Mental Disease 166 (1978) : 307-316.

⁶ J.C. Hilyer, Jr. & W. Mitchell, "Effect of Systematic Physical Fitness Training Combined with Counseling on the Self-Concept of College Students," Journal of Counseling Psychology 26 (1979) : 427-436. Thomas R. Collingwood & Leonard Willett, "The Effects of Physical Training Upon Self-Concept and Body Attitude," Journal of Clinical Psychology 27 (1971) : 411-412.

There is insufficient information on the effect of individual counseling alone or in conjunction with a low impact aerobic exercise program on the self-esteem of adult women over the age of 18. As documented, the research testifies that women overall have lower self-esteem than men. This clearly indicates the necessity for more research to be conducted regarding ways to enhance women's self-esteem.

Significance of Study

This study will address the current research gap regarding women over 18 and the effects of an intervention consisting of aerobic exercise along with individual counseling on their self-esteem. The significance of this study is that it will provide information on a specific intervention pertaining to a woman over 18. It also will supply information on the effects of a combination of aerobic exercise in conjunction with individual counseling on a woman's self-esteem.

If not further addressed, women over 18 will not benefit from additional, pertinent information regarding positive ways to effect their self-esteem level. Thus, the gap existing between the differing self-esteem levels of men and women will persist. If conclusions are reached regarding how to positively influence women's self-esteem, the implications could be far reaching; with this information, clinicians as well as individual women may be enabled to counter negative self-esteem at its point of recognition. This will also further the broad knowledge base encompassing self-esteem.

Purpose of Study

Using a single systems design, this study determined the extent to which an intervention of individual counseling and participation in low impact aerobics influenced a woman's self-esteem. It was believed by this researcher that the possible effects of low impact aerobics, including enhanced fitness and overall better health, weight loss, body toning/conditioning, and improved physical appearance would lead to an increase in self-esteem for the subject. It was further thought that aspects of individual counseling, including self disclosure (by both the practitioner/researcher and the client/subject), augmented self-awareness, acceptance by the counselor, encouragement, clarification of emotions and environmental effects, as well as possible resolution of problems would also lead to an increase in self-esteem.

CHAPTER TWO

Literature Review

Many studies have been conducted regarding the effects of physical activity on self-esteem. Studies have also been conducted pertaining strictly to women in which the effects of physical activity and fitness were examined on psychological states (which directly impact self-esteem) and self-esteem specifically. Furthermore, studies have been conducted which analyzed support, groups and other characteristics of individual counseling (including empowerment) and their effect on self-esteem. These research articles will be discussed in detail in the following five sections of this literature review.

Interventions Involving Physical Activity Aimed at Enhancing Self-Esteem

Melnick and Mookerjee studied the effects of weight-training on self-esteem on college students and found the weight training participants experienced much greater self-esteem.¹ They studied the effects of advanced weight training on body-cathexis and self-esteem over a 16 week period.

They utilized 27 (17 males, 10 females) college students as an experimental group and a control group consisting of 30 (16 males, 14 females) students. Both groups had mean ages around 23. Also, both groups took the Rosenberg Self-esteem Scale and The Secord and Jourard Body-cathexis Scale at pre- and post-test times. The experimental

¹ Melnick & Mookerjee, Perceptual, 72.

group participated in a weight-training course and following the study, they experienced higher self-esteem and body-cathexis scores.

Possible shortcomings of the Melnick and Mookerjee study include the utilization of convenience samples versus random sample or random assignment of participants. Also, only group data were analyzed in order to protect anonymity; the participants' test scores were not matched to see individual improvement. In addition to this, the identification of extraneous variables, such as socializing, which may have added to the subjects' improvement in overall self-esteem was not done.

Mink studied the effects of assertiveness training on college students and did not find a significant difference in self-esteem.¹ Mink studied assertiveness training and its effects on internal locus of control, assertiveness and self-esteem of college students (male and female).

All of the subjects, 120 total, were students at the University of Arkansas, Fayetteville in the 1990 school year. The groups were assertiveness training, a control group and health instruction. Internal health locus of control, assertiveness, and self-esteem were determined via self-report questionnaires. After comparing the pre- and post-tests for the three groups, no significant difference in self-esteem was found.

A possible flaw in this study is the absence of a standardized self-esteem measure; Rosenberg's Self-Esteem Scale and/or the Tennessee Self-concept Scale may have been more suitable versus self-report questionnaires.

¹ Edward Michael Mink, "The Efficacy of Assertiveness Training to a Traditional Health Instructional Course for College Students," Unpublished doctoral dissertation (1991) University of Arkansas.

***Interventions Involving Physical Activity in Conjunction with Group Counseling
Aimed at Enhancing Self-Esteem***

Hilyer and Mitchell studied the effects of physical activity as well as physical activity in combination with counseling on the self-concept of college students; they reported significant changes in self-concept dimensions.¹ Physical activity in conjunction with counseling gained results which were easier to generalize for positive self-concept change. Nineteen was the mean age and 43 of the 120 subjects were female. All subjects were pre-tested with the TSCS for the overall self-concept score. Of three groups of 40 students, one experimental group received flexibility and systematic distance running training, a second group received this training in addition to 1 hour per week of group counseling to emphasize progress in fitness training, and a control group experienced neither physical fitness training nor counseling.

The training program had a duration of 10 weeks and following it, the group receiving only fitness training significantly gained positively in overall self-concept according to the TSCS. The group receiving both counseling and fitness training also experienced increases in self-concept.

Possible flaws in the Hilyer and Mitchell study include the possibility that uncontrolled extraneous variables in the subject's environments may have had an impact on the results. Also, an extended participation time period may have resulted in more compact results. Furthermore, with this type of design, a fourth experimental group could have been established in which only counseling was received. Finally, a pre-test

¹ Hilyer & Mitchell, Journal of Counseling Psychology, 26.

and post-test of fitness as well as self-concept levels could have been administered to the control group.

Collingwood and Willett studied the effects of physical training upon self-concept and body attitude.¹ Five teenagers, all male, ranging in age from 13 to 16 enrolled in a special 3 week physical training obesity program offered by the YMCA. The subjects were in the pool and the gym for one hour each, every day; over the 3 weeks, this provided a total of 30 hours of activity. The subjects also participated in a total of 3 hours of group counseling/discussion.

Collingwood and Willett utilized an abbreviated form of the Body Attitude Scale which had 15 body concepts. Each of the teenagers had an evaluative body attitude score, an Activity body attitude score, as well as a Potency body attitude score. An Index of Adjustment and Values (IAV) was also used. Thus, self acceptance, self concept, ideal self and real vs. ideal self discrepancy grades were gathered. These measures were given to the subjects prior to and following their participation in the program. Regarding the IAV, a significant increase was found on the self concept aspect as well as a significant increase on the self acceptance portion. Regarding ideal self, a significant increase was not found.

Possible flaws of this study include the small size of the group of subjects. Also, a control group could have been utilized to increase this study's internal as well as external validity. Furthermore, an extended program of more than three weeks may have produced more confirmed results.

¹ Collingwood & Willett, Journal of Clinical Psychology, 27.

Studies Specific to Women on the Effects of Physical Activity or Fitness on Psychological States

Aerobic exercise done regularly was found to have a positive effect on the psychological functioning of women by Labbe, Welsh, and Delaney.¹ These researchers analyzed the effects of regular aerobic exercise on anxiety, depression and health locus of control regarding sedentary women. Randomly, 26 females were utilized. They were volunteers from Mobile, Alabama and were found through newspaper and campus articles. They ranged in age from 29 to 50 years old, and their mean age was 36.4. Their mean weight was 163.47 lb., with a range of 129 to 220 lb. Ten participants were assigned to an exercise group and 16 were assigned to an exercise group in conjunction with lessons regarding thinking strategies.

Measures utilized included the Jenkins Activity Survey, a health history questionnaire, State-Trait Anxiety Inventories (Form X), Beck Depression Inventory and Multihealth Locus of Control. A *t* test was used. Rates of depression and anxiety were lessened and at the conclusion of the study, depression was correlated with body mass index. State-anxiety after the study was significantly correlated with exercise follow-ups regarding frequency after six weeks. The study found that regular aerobic exercise positively affected psychological functioning.

An imperfection in this study is that some participants provided thorough data and the design did not provide for a zero exercise variable. Also, more females possibly should have been utilized. The follow-up period could also have been lengthened.

¹ Elise E. Labbe, M. Cay Welsh & Deena Delaney, "Effects of Consistent Aerobic Exercise on the Psychological Functioning of Women," Perceptual and Motor Skills 67 (1988) : 919-925.

Jasnoski, Holmes, Solomon and Aguiar found that women who participated in an aerobics class experienced changes in self-perception.¹ They studied exercise, changes in aerobic capacity, and changes in self-perceptions in regards to their female subjects. The subjects were 20 females in an aerobics class, known as the exercise training condition. Two other groups consisted of the waiting-list control conditions (eight women who registered for the class, but were not enrolled due to limitations) and an independent control condition (11 females who did not register for the aerobics class). All participants were under 30 and were undergraduate students at the University of Kansas.

Aerobic capacity, confidence, and self-perceived abilities were measured before and after the 10 weeks of aerobics, which met twice a week for one hour. The influence of training on aerobic capacity was calculated via an analysis of variance and the training was found to be effective in raising the aerobic capacity of the subjects.

Regarding the influence of training on changes in self-perceived abilities and confidence, a multivariate analysis of variance was utilized to contrast those in the training condition, waiting-list control condition, and the independent control condition. The exercise did increase perceptions of abilities and confidence. Relationships between changes in aerobic capacity and changes in self-perceived abilities and confidence were then analyzed. Correlations were done, which were not reliable and thus changes in aerobic capacity did not correlate to those in self-perceived abilities and confidence.

Results showed that aerobic exercise increased the subjects' aerobic capacity and the participants stated they experienced enhancements in physical and nonphysical

¹ Mary L. Jasnoski, David S. Holmes, Sheldon Solomon & Chris Aguiar, "Exercise, Changes in Aerobic Capacity, and Changes in Self-Perceptions: An Experimental Investigation," Journal of Research in Personality 15 (1981) : 460-466.

abilities and confidence. It is suggested that changes in self-perception were a result of social or personal conditions, such as achievement of goals, group involvement, or expectancies. A possible flaw of this research is that it may have observed people who were not in average physical shape; for a group like this, fitness changes may have a more tremendous impact. Also, the researchers may have looked at personality styles and utilized a more strenuous exercise program, one which met more than twice a week.

In her study, Frost utilized "Model Mugging," a course aimed at increasing women's physical self-defense capabilities as well as psychologically empower them.¹ She found that after completing this course, women experienced an increase in self-esteem.

Frost studied the effect of this course, which is based on the intent to improve women's physical self-defense abilities. Two groups of females were give questionnaires pre-intervention, post-intervention, and as a follow-up. Sixteen females completed the course, while 13 women comprised a control group. Differences were found on interpersonal self-efficacy, self-defense efficacy, and helplessness. Self-esteem was included within these measures.

A possible imperfection in this study includes the small number of participants. With a larger pool of subjects, these results may have had more rationale to be further generalized.

¹ Heather Lynn Frost, "'Model Mugging': A Way to Reduce Women's Victimization (Self Defense, Rape Prevention)," Unpublished doctoral dissertation (1991) University of Kansas.

Studies Specific to Women Regarding the Effects of Physical Activity on Self-Esteem

The results of a study conducted by Plummer and Koh indicated that aerobics enhances the self-esteem of women.¹ These researchers studied the effect of aerobics on college women's self-esteem. They utilized 116 women who were in aerobics classes as well as 177 who were in nonphysical education classes. Both groups included freshman to senior level female students. The mean age for the experimental group was 22.6 years (ranging from 17 to 51) while for the control group it was 21.6 years (ranging from 17 to 57). They administered the Tennessee Self-concept Scale (TSCS), which is comprised of 100 self-describing statements that allow self-portrayal, two weeks after the semester had begun and two weeks before it's conclusion. The experimental group of 116 females participated in 10 weeks of aerobics between pre- and post-tests of the TSCS.

Relevant differences were obtained in self-concept means between the two groups via analysis of covariance; the score taken prior to the intervention was used as a covariant. On the global self-concept score and seven out of nine subscales, the aerobics group had greater scores than the nonphysical education classes. A possible flaw in this study is that those students who took the aerobics classes were possibly prepared for and/or anticipated a positive change in their self-esteem and thus this enhancement of their self-esteem was merely facilitated through the aerobics class.

Trujillo also found the self-esteem of college women to increase in weight training and running groups.² This researcher assessed the effect of weight training and

¹ Olena Plummer & Young O. Koh, "Effect of 'Aerobics' on Self-Concepts of College Women," *Perceptual and Motor Skills* 65 (1987) : 271-275.

² Carla M. Trujillo, *International Journal of Sports Psychology*, 14.

running exercise intervention programs on the self-esteem of college women. The weight training group was composed of 13 females, the running group 12 females, and the control group 10 women, for a total of 35 subjects participating in the 16 week program. The subjects were female undergraduate students at The University of Wisconsin.

The subjects were pre- and post-tested during a semester for self-esteem, physiological consequences, sex role identity, and psychological attitudes. The Tennessee Self-concept Scale, the Bem Sex Role Inventory, an attitude questionnaire, and physiological measurements were utilized. The Tennessee Self-concept Scale (TSCS), a five-point Likert format self-rating scale, was utilized to assess self-concept change.

The within group comparison of data from the TSCS was studied with the matched pair *t* test to measure increases or decreases between the before and after individual scores. For both groups, the running group as well as the weight training group, self-esteem increased noticeably. The control group experienced an insignificant loss in self-esteem.

A questionnaire was also utilized to collect additional attitudinal information. In response to it, most women (75% of the running group and 83% of the weight training group) indicated that they physically felt better and that they had a more positive self-image. Also, the weight training group experienced physiological increases while the running group gained in cardiovascular health.

A possible flaw in this study includes that the control group was composed of a group of students who were active in an array of physical activities. Thus, it is possible that the lack of variation of anaerobic and aerobic exercises may have had an effect as a result of lack of solid proof of progress. While 83% of the weight training group felt physically and psychologically better, only 35% of the running group felt this way.

Henderson observed self-concept changes in female college students following participation in a physical conditioning program.¹ He utilized 95 female subjects, all who were taking an introductory psychology class. He administered the Rotter Internal-External Control Scale, Secord and Jourard's Body and Self Cathexis Scale and a Semantic Differential Scale of Self to the 59 experimental subjects prior to and following a 6 week physical conditioning program. During this program, they gained the ability to run for 21 minutes without having to stop. A control group composed of 36 women from the same psychology class took the measures previously listed before and after the same six week period to serve as an experimental group.

These 59 subjects composing the experimental group were divided into two groups, one of 38 subjects and the other with 21 subjects. The larger group was conditioned by two male experimenters, with the smaller group of 21 subjects being conditioned by two female experimenters. No significant differences were obtained on the Internal-External Control Scale or the Semantic Differential Scale of Self. But, the experimental group did gain over the control group in regards to physical condition. Also, the experimental group rated higher on the Body and Self Cathexis Scale at the end

¹ J.M. Henderson, "The Effect of Physical Conditioning on Self-concept in College Females," Dissertation Abstracts International 35 (1974) : 3063.

of the six week period, supporting the researcher's hypothesis that enhanced physical condition positively affects how the subjects would rate themselves. This research could be improved by a longitudinal study.

Finkenberg studied the effect of participation in Taekwondo on college women's self-concept.¹ He utilized 51 females enrolled in Taekwondo classes and 49 females in 4 different health courses, studying health and consumer health. The mean age for the martial arts group was 22.61 years (with the range being 18 to 31), while for the control group it was 22.94 years (with the range being 19 to 32). No one participating in the study had prior martial arts experience.

They were given the Tennessee Self-concept Scale in the first week of the semester as a pre-test and during the last week of the semester as a post-test to determine how Taekwondo effects self-concept. Between tests, the Taekwondo participants were in 18 weeks of classes. With pretest scores as the covariate, using analysis of covariance, significant variations were found on subscale scores in personal, social, physical, satisfaction, and identity as well as on complete self-concept.

Finkenberg found participation in Taekwondo improved college women's general self-esteem and thus supports the conclusion that a month or two of martial arts training will improve a student's general level of self-esteem. A larger pool of subjects as well as a longitudinal study of the effects of Taekwondo would improve the external validity of this study by allowing for multiple measures.

¹ Mel E. Finkenberg, "Effect of participation in Taekwondo on College Women's Self-Concept," Perceptual and Motor Skills 71 (1990) : 891-894.

Brown, Morrow, and Livingston also studied self-concept changes in college women as a result of training.¹ They found that their participants exhibited dramatic differences in self-concept after participating. These researchers studied self-concept changes in college-aged women as a result of 14 weeks of conditioning training. An experimental and control group were utilized and each had 50 subjects. Training was predominantly aerobic, with jogging constituting a majority of the 105 minutes of activity weekly. Analysis of variance was used to compare the two groups on scores of the TSCS.

At the conclusion of the training, the experimental group exhibited significant differences in self-concept. However, these were not able to be generalized overall for self-concept. A flaw of this study is that variables other than the training were not considered or controlled for regarding their possible effect upon self-concept.

Glassford found an increase in physical self-efficacy and physical competence in women but not an increase in self-esteem overall following an exercise intervention.² This researcher studied the effect of exercise on self-esteem, physical fitness, physical self-efficacy, physical competence, physical acceptance, locus of control and hope regarding women.

She did an eight-week exercise program with sedentary women and also had a control group of sedentary females. Sonstroem and Morgan's model for the relationship between exercise and self-esteem with inactive, non-clinical women was tested but not

¹ E.Y. Brown, J.R. Morrow, Jr. & S.M. Livingston, "Self-concept Changes in Women as a Result of Training," *Journal of Sport Psychology* 4 (1982) : 354-363.

² Jeanine Marie Glassford, "The Effect of Exercise on Physical Fitness, Physical Self-Efficacy, Physical Competence, Physical Acceptance, Self-Esteem, Locus of Control, and Hope," Unpublished doctoral dissertation, University of Alberta (Canada).

supported. A change in physical self-efficacy and physical competence (as with Jasnoski et al.) was noted; however, self-esteem as a whole was not effected.

Imperfections in this study include that the exercise program could possibly have been extended more than eight weeks, possible effects on self-esteem could have been taken at intervals during the eight week aerobic program via the Sonstroem and Morgan model and a control group of active females could have been utilized for comparison.

Nor did Nagy and Frazier discover a correlation between the self-esteem of women and an aerobic training program.¹ Nagy and Frazier studied the impact of exercise on self-esteem, locus of control and the mood states of their female subjects. Their subjects were 85 females, between the ages of 18 and 36 who were categorized according to their prior exercise experience: 54 had no steady exercise pattern and 31 had been involved in a specific exercise program during the prior three months. The subjects participated in a 15 week aerobic training program.

The researchers utilized an adult self-esteem inventory, the Profile of Mood States and a locus of control instrument. They found the aerobic training program to have no influence on the self-esteem of the subjects and furthermore, no effect regarding mood state improvement.

A possible flaw in this study is that a more standardized self-esteem scale, such as Rosenberg's Self-Esteem Scale and/or the Tennessee Self-concept Scale, could have been utilized. Furthermore, it may have been beneficial for this study to have employed a control group.

¹ Stephen Nagy & Scott Frazier, "The Impact of Exercise on Locus of Control, Self-Esteem and Mood States," Journal of Social Behavior and Personality 3 (3) (1988) : 263-268.

The majority of these studies support and are consistent with the theory that physical activity has a positive effect upon the self-esteem, specifically that of women. The studies of Hilyer and Mitchell as well as Collingwood and Willett also support the positive effects of physical conditioning in conjunction with group counseling on self-esteem (although their subjects were male and female or only male).¹

However, Glassford did not find the effect of exercise to increase overall self-esteem in women, although she did find it to improve physical self-efficacy and physical competence.² Nor did Nagy and Frazier find an aerobic intervention to effect women's self-esteem.³ Mink did not find assertiveness training to effect self-esteem.⁴ Also of interest, Jasnoski et al. found changes in women's self-perceptions following a fitness program; however, they suggest that the changes were related to social or personal factors involved with the program, such as expectations or group association, rather than changes in fitness.⁵

¹ Hilyer & Mitchell, Journal of Counseling Psychology, 26.

Collingwood & Willett, Journal of Clinical Psychology, 27.

² Glassford, The Effect of Exercise.

³ Nagy & Frazier, Journal of Social Behavior and Personality, 3 (3).

⁴ Mink, The Efficacy of Assertiveness Training.

⁵ Jasnoski et al., Journal of Research in Personality, 15.

Studies (Most of Which are Specific to Women) Analyzing Groups, Support and Other Characteristics of Counseling and their Effect on Self-esteem

Labreche-Gauthier and De-Man studied suicide ideation and community support in an evaluation of two programs.¹ They utilized 10 suicidal men and 21 suicidal women in a study of the various effects of two short-term (12 week maximum) community-based support programs for self-esteem, suicidal tendencies and stress. The participants either contacted the center on their own, had given permission to family members to request help or were referred by mental health workers.

Sixteen subjects were placed in the standard program which offered help with social support and fifteen participants were placed in the program that also provided assistance in enhancing self-esteem and stress management skills in addition to social support services. Subjects in the special support group received assistance in approaches to problem solving, goal setting practice, relaxation methods and help with enhancing their self-esteem.

Rosenberg's Self-esteem Scale was used to measure self-esteem; this has 19 items scored on a 4 point scale from strongly disagree to strongly agree. This scale was given to the subjects prior to and following the 12 week programs. Analysis of variance of this data provided a significant result, with members of both groups experiencing an increase in self-esteem.

¹ A. De-Man & L. Labreche-Gauthier, "Suicide Ideation and Community Support: An Evaluation of Two Programs," Journal of Clinical Psychology 47, 1 (1991) : 57-60.

A shortcoming of this study is the lack of a typical control group. However, due to ethical reasons this would not be possible; suicidal individuals could not be allowed to go without attention.

Yahne and Long conducted a study analyzing the utilization of support groups to increase self-esteem for women.¹ Their subjects were 33 undergraduate as well as graduate students, between the ages of 21 and 62; the participants were either referred by mental health practitioners on campus or came to the study through an advertisement for a group for women.

Their counseling intervention was based on a structured support group for females and met for 2 hour sessions a total of 6 times. Within the group, the women were exposed to support from their peers, counseling and skills-learning. According to the Personal Orientation Inventory subscale, participants experienced an increase in self-esteem significantly in comparison to subjects in the control group (who were on a waiting list).

This study may have been improved with a longer intervention period, lasting more than 6 weeks. A larger participant pool may also have enhanced this study's external validity.

Marr and Fairchild conducted a study centered around a problem-solving strategy and the self-esteem of chemically dependent females in recovery.² These researchers studied 4 females between the ages of 26 and 41 who were in recovery from chemical

¹ Carolina E. Yahne & Vonda O. Long, "The Use of Support Groups to Raise Self-esteem for Women Clients," Journal of American College Health 37,2 (1988) : 79-84.

² Diane D. Marr & Thomas N. Fairchild, "A Problem-Solving Strategy and Self-esteem in Recovering Chemically Dependent Women," Alcoholism Treatment Quarterly 10, 1-2 (1993) : 171-186.

dependence. They analyzed the effectiveness of a problem solving skills intervention, which was conducted through 8 sessions, in enhancing the self-esteem of the 4 subjects.

The Tennessee Self-Concept Scale was utilized before and after the intervention occurred, positive journal entries were considered and self-ratings in the subjects' thinking and mood areas in regards to decision making ability were all taken into consideration in the researchers' measurement of the subjects' self-esteem. The researchers utilized modeling, visualization, group exercises as well as group discussion, lectures and role play to teach problem solving skills. Of the four initial subjects, three exhibited self-esteem improvement.

This study could be improved by the utilization of a larger subject pool.

Carolyn S. Carter's dissertation, entitled *Treatment of Alcoholic Women: The Effects of Gender-specific Intervention on Treatment Outcome*, was conducted to discover if a gender-specific intervention enhanced alcoholic females' self-esteem along with decreasing their dependency, sex-role conflicts and depression ratings.¹ The Gender-specific Intervention (GSI) is an empowering, skills learning, educational, group intervention with a cognitive-behavioral approach which aims to reinforce the subjects' new skills through role play. The author states that Gender Aware Therapy (GAT) supports the strategic parts of GSI.

Within a group setting, GSI was composed of four activities. The initial twenty minutes of a session were spent with the subjects listening to one of seven teaching lectures. The next fifteen minutes involved discussion of the topic presented. The

¹ Carolyn S. Carter, "Treatment of Alcoholic Women: The Effects of Gender-Specific Intervention on Treatment Outcome (Women Alcoholics)," VMI Dissertation Services (1993) : order # 9319440.

intensely structured role plays were done for five minutes. The fifteen minutes left in the group session were used to process the role play exercises. Fundamentally, GSI is believed to encourage skills development by teaching skills and reinforcing them through the use of role play.

This fourteen week study compared three groups of alcoholic females on self-esteem, sex-role conflicts, depression and dependency. The sixteen subjects, six of whom were female ranging in age from 28 to 53, all attended Southern University at New Orleans (SUNO). To test self-esteem, the author utilized a self-esteem questionnaire, SEQ-3, which has high internal consistency and reliability. Hypothesis One stated that the self-esteem of the subjects would increase through esteem-building interventions. The lecture administered pertaining to self-esteem involved assertion training. The SEQ-3 answers were rated by Hoffmeister of Test Analysis and Development Corporation.

Utilizing ANOVA, Carter found a statistically significant ($p=.01$) enhancement occurred over time in the test scores of the self-esteem measure for the female subjects. Over three testing periods, there was an increase in the mean self-esteem scores for the female subjects. Furthermore, written self reports indicated higher self-esteem than the level noted at the pre-test level. The female subjects described how they had been empowered by the GSI. They stated they were now more confident, less shy, excited about life, fearless, and had an awareness of their newly acquired life skills.

A shortcoming of this intervention is the absence of a control group. This would have provided the researcher with a higher confidence level that the esteem-building aspects of the GSI actually caused the increases in subject's self-esteem levels.

Buehler and Legg studied the effects of social support on the psychological well-being of mothers following marital separation.¹ Previously, researchers have found that mothers frequently experience feelings of low self-esteem during marital separation.² Caldwell and Bloom found social support to be an important influence on mothers' psychological well-being after separation from their husbands.³

Buehler and Legg utilized 144 women who were separated from their spouses for approximately 5-6 months and had children younger than 19.⁴ Court records from a southeastern city were utilized to identify the population. Of the original 422 mothers selected, 144 met the necessary criteria: they finished the questionnaire correctly and had children living with them a minimum of half of the time. The subjects' ages ranged from 20 to 45 years old, with a mean age of 30.69 and a standard deviation of 5.78. The subjects were predominantly Caucasian, the mean amount of time they were married was 9 years and the median length of separation was 5 months. The majority of the mothers (88%) had 1 or 2 children.

Psychoemotional well-being was measured by compiling emotional mood and self-esteem measures. Self-esteem was determined through use of the Rosenberg Self-esteem Scale. This index measures an individual's good and bad self attitudes with an agree/disagree format. The correlation between self-esteem and emotional affect was .73; thus, the two were joined into one category, psychoemotional well-being. These two

¹ Cheryl Buehler & Bobbie H. Legg, "Mothers' Receipt of Social Support and Their Psychological Well-Being Following Marital Separation," Journal of Social and Personal Relationships 10 (1993) : 21-38.

² E.M. Hetherington, M. Cox & R. Cox, "Effects of Divorce on Parents and Children," in Nontraditional Families, ed. M. Lamb (Hillsdale, NJ: Erlbaum, 1982), pp. 233-88.

³ R.A. Caldwell & B.L. Bloom, "Social Support: Its Structure and Impact on Marital Disruption," American Journal of Community Psychology 10 (1982) : 647-67.

⁴ Buehler & Legg, Journal of Social and Personal Relationships, 10.

characteristics were not easily separated with these subjects although self-esteem and emotional affect could be distinguishable attributes.

Social support was measured in three aspects: functions of support, global support and support sources. Sources of support included relatives, mental health workers, technical assistance, friends, children and associates. Three groups were developed to classify the functions of social support; these were social companionship, esteem support and instrumental support. Social companionship revolved around attaining social needs, esteem support around talking about feelings and building a sense of importance and self-worth and instrumental support involved children and finance.

According to the results, the association between life change and psychological well-being (including self-esteem) was aided by numerous facets of social support. The facets included support from friends and family, the diversity of areas from which support was received and support that improved self-esteem and gave companionship. The womens' relationships were benefited by support to a statistically significant degree.

Theoretical Framework

This study examined the effect of participation in an exercise program consisting of aerobics in conjunction with individual counseling on the self-esteem of a woman over 18. It was believed that the intervention of low-impact aerobics with individual counseling would enhance self-esteem. In other words, as the female subject increased

her aerobic participation and had more individual counseling sessions, her self-esteem would increase.

To support this, it was suggested that there would be a definite distinction in the self-esteem scores taken prior to the intervention in comparison to the scores taken following the treatment; those following the intervention were predicted to be higher than those taken before the treatment intervention.

The predominant theory suggests that physical activity increases the body's overall health, including psychological wellness which encompasses self-esteem. As stated previously, Melnick & Mookerjee state that physiological capabilities and body image contribute to self-esteem; they state that physical self is a domain of the multidimensional construct of self-esteem.¹ Fox and Corbin speculate that this dimension of self-esteem consists of five aspects: physical attractiveness, competence, strength, physical self-worth, and physical condition.² Secord and Jourard found that how a person feels about their body closely relates to how they feel about themselves.³ Numerous studies sight the benefits of exercise programs on the self-esteem of women. As also stated previously, Plummer and Koh found aerobics to improve the self-esteem of women.⁴

It was the belief of this researcher that many of the various benefits derived from low-impact aerobics would contribute to the enhancement of the subject's self-esteem. Participation in this physical aspect of the intervention was likely to improve the

¹ Melnick & Mookerjee, *Perceptual and Motor Skills*, 72.

² Fox & Corbin, *Journal of Sport and Exercise Psychology*, 11.

³ Secord & Jourard, *Journal of Consulting Psychology*, 56.

⁴ Plummer & Koh, *Perceptual and Motor Skills*, 65.

subject's fitness level and overall health, as well as result in weight loss, produce toning and conditioning of the subject's physical body; as a result of these benefits, enhancement of the subject's physical appearance as a whole was expected. Each and all of these possible advantages would in turn improve the overall self-esteem level of the female client.

Individual counseling provided the subject with a sense of empowerment through psychological validation of her emotions along with a sense and value of her own uniqueness. Individual counseling also provided the subject with an opportunity to express and work through various feelings, including ones of possible confusion, identity, and insecurity. Individual counseling promoted an opportunity for the client to increase her self awareness and self acceptance as well as experience acceptance by the counselor (this researcher) through self-disclosure. Furthermore, it promoted clarification of emotions, effects of the environment and possibly resolution of issues. Support is yet another aspect of counseling which assisted in the female client's self-esteem enhancement.

These opportunities along with a multitude of others provided through individual counseling empowered the subject and thus enhanced her self-esteem. Following participation in a self-defense class which had an objective of empowering women, Frost found that women experienced an increase in self-esteem among other psychological advantages.¹

¹ Frost, "Model Mugging."

Research Question and Hypothesis

Based on the forgoing literature review, theoretical framework and the general purpose of the study, below are the research question and hypothesis of this study.

Q1 To what extent will a female subject over the age of 18 exhibit improved self-esteem during an intervention consisting of individual therapy in combination with participation in low impact aerobics.

H1 It is hypothesized that at the completion of the intervention of individual counseling along with participation in low impact aerobics, the self-esteem of a woman over 18 will be enhanced.

CHAPTER THREE

Methodology

Design and Sample

Utilizing the AB single systems design, a baseline phase was established during the initial five weeks of the study through the WALMYR Index of Self-esteem.¹ The AB design was selected due to its suitability for direct practice, the provision of a baseline from which improvement may be measured and for the high degree of internal validity it offers. The intervention phase commenced at the beginning of the sixth week. Self-esteem was measured weekly and observed by this researcher via the Index of Self-Esteem of the WALMYR Assessment Scales (WAS) over the ensuing five weeks.² Data collection occurred over a total of a ten week period.

Early during the sixth week, the subject began participating in low-impact aerobics three times per week for the following five weeks. The subject participated in aerobics at home (via the Denise Austin show) three times a week for 30 minutes each day; this aspect of the intervention was self-administered by the female subject via video tapes provided by this researcher. This reduced the possibility of external factors influencing the subject's self-esteem. As Jasnoski et al suggested in their study, subjects may gain fulfillment through group involvement among other possibilities.³

¹ W.W. Hudson, The WALMYR Assessment Scales Scoring Manual (Tempe, AZ: WALMYR, 1992).

² Ibid.

³ Jasnoski et al., Journal of Research in Personality, 15.

This researcher administered the individual therapy component for one hour a week during the intervention at the subject's home. The subject began weekly individual therapy sessions at the beginning of the sixth week during which emotions were discussed and psychological empowerment was expected to occur via personal expression and revelations. The subject discussed her three marriages, the death of her mother to cancer, her ongoing feelings of depression, her current husband's ex-wife and the impact she continues to have on their lives, her step-daughter, her dissatisfaction with her job and her overall lack of self-esteem.

Self-esteem building activities were also conducted. The subject was instructed to tell this researcher something good about herself at the beginning of each session as well as to begin each day with a pleasant thought about herself. Therapy continued in conjunction with the aerobic training for the ensuing five weeks.

The subject, or unit of observation and analysis, of this study was a woman over the age of 18 who had not participated in an exercise program in the past three months or engaged in individual therapy during the past year. The subject was attained through personal referral.

Measurements

Self-esteem was measured through the Index of Self-Esteem (ISE). The ISE operationalizes self-esteem through its attitudinal indicators which reflect the subject's self-esteem. The ISE is one of the WALMYR Assessment Scales (WAS); this set of

scales was designed specifically for use with single-system evaluation.¹ These scales were designed to observe and evaluate the extent, intensity and degree of a problem by having the client take the same index throughout the intervention. These scales typically have internal consistency reliabilities greater or equal to 90% and they measure what they are expected to measure.²

The ISE has clients rate each of the 25 items on a 7-point scale which ranges from 1 to 7, with 1 being "none of the time" and 7 being "all of the time." The lowest total score is 0 and the highest is 100, with higher scores suggesting a higher degree of the problem. The scale also has "reverse-score" questions to reduce response set bias.

Scoring begins with reversing items 3, 4, 5, 6, 7, 14, 15, 18, 21, 22, 23, & 25. A score of 7 is changed to 1, 5 is changed to 3, 4 remains 4, 6 is changed to 2, 3 is changed to 5, 2 is changed to 6, and 1 is re-scored as 5. The next step is to add all the scores. Then subtract the number of completed items; this would be 25 if all statements were answered. This number is multiplied by 100 and then divided by the number of items completed multiplied by 6 (the largest possible value for a response, minus 1). Any blank statement is given a 0 score.

The higher the score, on a 1 to 100 range, the greater the magnitude of the problem. The clinical cut off is 30, suggesting that someone scoring above 30 experiences self-esteem problems and vice versa, a score below 30 indicates the absence of problems in the area of self-esteem.

¹ W.W. Hudson, WALMYR.

² M. Bloom, J. Fischer & J.G. Orme, Evaluating Practice: Guidelines for the Accountable Professional (Boston, MA: Allyn and Bacon, 1995), p. 195.

This scale was completed once a week by the subject and was analyzed to provide a weekly score. Over the initial five week period, a baseline was formed. As the treatment combination of aerobics and individual therapy was initiated during the sixth week, the ISE continued to be administered at the conclusion of each of the five weeks. Self-esteem, or the extent to which the female subject feels good about herself and has self-respect, was operationalized through the ISE of the WALMYR Assessment Scales.¹

¹ W.W. Hudson, WALMYR.

CHAPTER FOUR

Results

The intervention appears to have been successful considering the decrease in scores which occurred following the beginning of the implementation of the intervention. Although the subject maintained a score over 30 (which is indicative of a problem with self-esteem) throughout this study, her scores decreased continually from the time the intervention began until it's conclusion.

The descriptive findings indicate a successful intervention. The mean for the baseline scores was 71.33, substantially higher than that for the intervention phase, which was 51.87. The median for the baseline scores, 72.67, was also much higher than the median for the intervention phase, which was 48. The standard deviation score for the baseline phase was 3.13; this indicates high homogeneity for these scores which would be expected for a baseline. The standard deviation score for the intervention phase was much higher, at 10.35; this indicates more heterogeneity of these scores which is considered positive as these scores showed a consistent decrease with each week of the intervention. Figure 1 displays these findings.

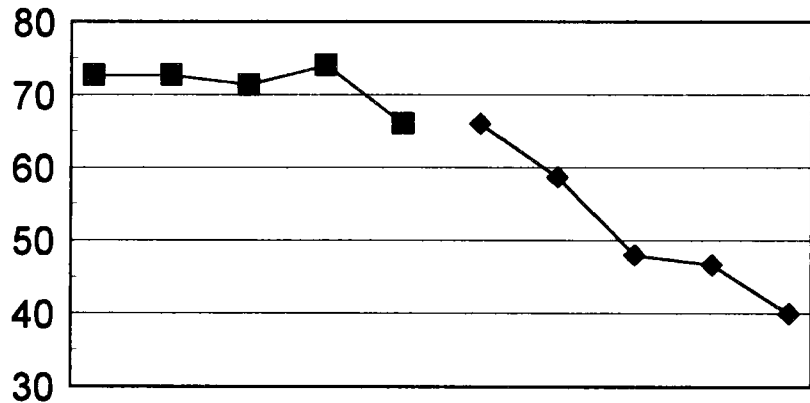
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**INDEX OF SELF-ESTEEM (ISE)
SELF-ESTEEM SCORES**



WEEKLY DATA COLLECTION POINTS	1	2	3	4	5	6	7	8	9	10
BASELINE PHASE ■	72.67	72.67	71.33	74.00	66.00					
INTERVENTION PHASE ◆						66.00	58.67	48.00	46.67	40.00

MEAN: BASELINE= 71.33 INTERVENTION= 51.87
MEDIAN: BASELINE= 72.67 INTERVENTION= 48
SD: BASELINE= 3.13 INTERVENTION= 10.35

FIGURE 1

This study hypothesized that an intervention of individual counseling in conjunction with participation in low impact aerobics would enhance the self-esteem of a woman over 18. A *t* test of group means was used to determine if the differences between the mean scores on self-esteem for the baseline and intervention phases were statistically significant. The probability level was set .05.

The *t* test was administered rather than chi square because the intervention was measured on an nominal scale (categorically) and self-esteem was measured on an interval scale (continuously). With chi square, both the independent and dependent variables are measured categorically.

Table 1 presents results of the *t* test. The results reveal that the difference between the pre-intervention and intervention mean scores on self-esteem was statistically significant. Thus, it is appropriate for the hypothesis of this study to be accepted.

Table 1

T-test of self-esteem by phase type

Phase	N	Mean	Standard Deviation	Significance
pre-intervention	5	71.33	3.13	$t = 4.02$
				$df = 4.72$
post-intervention	5	51.87	10.35	probability=.006

CHAPTER FIVE

Discussion and Implications

This study found an intervention of individual counseling in conjunction with participation in low-impact aerobics to improve the self-esteem of a female single subject over the age of eighteen. From this researcher's analysis of the data, it was readily apparent that upon the commencement and throughout the intervention, the subject's self-esteem continually improved. The subject's self-esteem got better with each week of the intervention. Interestingly, the subject did score the same score during the last week of the baseline phase as in the initial week of the intervention phase; this suggests that the minimal amount of interaction of this researcher with the subject already had a small positive impact upon the subject.

This intervention is believed to have worked because physical activity has been shown to increase self-esteem. Numerous benefits may be derived for participation in low-impact aerobics; among them, the subject's fitness level and overall health most likely improved, she may have experienced weight loss and experienced toning and conditioning of her body. In turn, these benefits may have further assisted in improving the subject's overall self-esteem.

The individual counseling aspect of the intervention is also believed to have enhanced the subject's self-esteem by offering the subject among other things, emotional support. These counseling sessions provided the subject with an opportunity to freely express her emotions with the acceptance of this researcher. They further provided an opportunity to express and work through various feelings, including ones of confusion,

opportunity to express and work through various feelings, including ones of confusion, identity, anger and insecurity. Her self-awareness and self acceptance was also encouraged. This also provided a sense of empowerment through the psychological validation of her emotions along with a sense and value of her own uniqueness. Furthermore, it promoted clarification of emotions, effects of the environment and resolution of issues.

Regarding the physical exercise component of this intervention, the findings are consistent with numerous other researchers. Many researchers have found that improved fitness may increase self-esteem.¹ Sonstroem studied 16 reports regarding the effects of exercise on self-esteem and concluded that the consistency of positive findings support the belief of the wholesome effects of exercise programs.² Other researchers have found that self-esteem and self-concept of college females was enhanced after participation in physical education classes and by increasing their fitness levels.³

This intervention's results are also consistent with other researchers' results who have studied the effects of physical activity in conjunction with counseling on self-concept. Hilyer and Mitchell reported significant changes in self-concept dimensions following an intervention of physical activity and counseling.⁴

At the micro level of social work practice, the finding of this valid study is relevant regarding direct practitioners' involvement with clients. This knowledge provides them with viable suggestions for ways to enhance adult females' self-esteem.

¹ Morgan, Exercise in Health and Disease. Rothfarb, "A Study of the Psychological Needs." Biles, "Self-concept Changes."

² Sonstroem, Exercise and Sport Sciences Reviews, 11.

³ Hughes, "A Comparison of the Effects of." Biles, "Self-concept Changes."

⁴ Hilyer and Mitchell, Journal of Counseling Psychology, 26.

Social work practitioners now have a viable suggestion of how to improve their female clients' self-esteem. To utilize this knowledge to its fullest potential, practitioners should see the client for a minimum of five weeks for hour counseling sessions while also having them participate in some form of aerobic activity, preferably low-impact aerobics. If for some reason, individual counseling sessions can not be conducted regularly, the practitioner may at least suggest aerobic participation to the female client to aid in improving her self-esteem.

At the macro level, this study provides program planners, developers and administrators with information pertaining to a successful intervention strategy to utilize when attempting to increase adult females' self-esteem. It could be made into policy, that when working with a adult female client suffering from poor self-esteem, the staff of mental health facilities, employee assistance programs, etc. put this intervention to action. This could be a standard measure for treating low self-esteem in women; again, a minimum of five hourly sessions in individual counseling and participation in aerobics.

For future research, it would be beneficial for this study to be replicated in its present form to verify results. Also, replication of this study with additional data collection weeks in both the baseline and particularly the intervention phase would increase its internal validity. This study could also be improved in future research by adding two more divisions to the intervention: participation in low-impact aerobics alone could be studied in relation to increasing a female's self-esteem and individual counseling could be studied alone in its effect on an adult female's self-esteem. As this study was a single systems design, only examining one person, it does not have high

external validity. It would be useful in the future to use experimental designs or multiple single systems designs that include more people or client groups to enhance external validity.

APPENDIX



INDEX OF SELF-ESTEEM (ISE)

Name: _____ Today's Date: _____

This questionnaire is designed to measure how you see yourself. It is not a test, so there are no right or wrong answers. Please answer each item as carefully and as accurately as you can by placing a number beside each one as follows.

- 1 = None of the time
- 2 = Very rarely
- 3 = A little of the time
- 4 = Some of the time
- 5 = A good part of the time
- 6 = Most of the time
- 7 = All of the time

-
1. ____ I feel that people would not like me if they really knew me well.
 2. ____ I feel that others get along much better than I do.
 3. ____ I feel that I am a beautiful person.
 4. ____ When I am with others I feel they are glad I am with them.
 5. ____ I feel that people really like to talk with me.
 6. ____ I feel that I am a very competent person.
 7. ____ I think I make a good impression on others.
 8. ____ I feel that I need more self-confidence.
 9. ____ When I am with strangers I am very nervous.
 10. ____ I think that I am a dull person.
 11. ____ I feel ugly.
 12. ____ I feel that others have more fun than I do.
 13. ____ I feel that I bore people.
 14. ____ I think my friends find me interesting.
 15. ____ I think I have a good sense of humor.
 16. ____ I feel very self-conscious when I am with strangers.
 17. ____ I feel that if I could be more like other people I would have it made.
 18. ____ I feel that people have a good time when they are with me.
 19. ____ I feel like a wallflower when I go out.
 20. ____ I feel I get pushed around more than others.
 21. ____ I think I am a rather nice person.
 22. ____ I feel that people really like me very much.
 23. ____ I feel that I am a likeable person.
 24. ____ I am afraid I will appear foolish to others.
 25. ____ My friends think very highly of me.

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